WHAT IS CLAIMED IS:

1. A method for measuring components of exhaled breath of a subject, comprising the steps of:

causing the subject to exhale into an appropriate apparatus for receiving exhaled breath;

increasing the pressure in the mouth of the subject to a level sufficient to cause the vellum of the subject to close and isolate the nasopharynx during exhalation; and

measuring the level of one or more components of the collected exhaled breath.

2. The method of claim 1, wherein said one or more components is nitric oxide.

3. The method of claim 1, further comprising the step of

collecting one or more components of exhaled breath prior to said measuring step.

4. The method of claim 1, wherein said one or more components substantially arises from the respiratory tract below the glottis.

5. The method of claim 4, further comprising the step of

maintaining a constant flow rate of the exhaled breath of the subject.

6. The method of claim 5, wherein said constant flow rate is accomplished by a resistance means associated or in flow connection with said receiving apparatus.

7. The method of claim 6, wherein said one or more components is nitric oxide.

8. The method of claim 6, wherein said maintaining a constant flow rate is effected by providing the subject with an instantaneous display of the pressure of the exhaled breath and the subject adjusts the force of the exhalation to maintain a constant pressure.

9. The method of claim 1, wherein said one or more components are selected from the group consisting of carbon dioxide, oxygen, nitric oxide, nitrogen, nitrogen dioxide, hydrogen peroxide, proteins, surfactants, DNA, acetone, ammonia, sulfur compounds, acetylene, carbon monoxide, ethane and pentane.

10. An apparatus for measuring components of exhaled breath of a subject, comprising

conduit means for receiving the exhaled breath from the subject;

means for increasing the pressure in the mouth of the subject to a level sufficient to cause the vellum of the subject to close and isolate the nasopharynx during exhalation; and

means for measuring the level of one or more components of the received exhaled breath.

11. The apparatus of claim 10, further comprising

means for providing the subject with an instantaneous display of the pressure of the exhaled breath so that the subject can adjust the force of the exhalation to maintain a constant pressure.

12. The apparatus of claim 10, wherein said pressure increasing means is sufficient to substantially excludes the presence of components of exhaled breath arising from the respiratory tract above the vellum.

13. The apparatus of claim 12, wherein said one or more components is selected from the group consisting of carbon dioxide, oxygen, nitric oxide, nitrogen, nitrogen dioxide, hydrogen peroxide, proteins, surfactants, DNA, acetone, ammonia, sulfur compounds, acetylene, carbon monoxide, ethane and pentane.

14. The apparatus of claim 13, wherein said one or more components is nitric oxide.

15. The method of claim 4, wherein at least about 90% of said one or more components arises from the respiratory tract below the glottis.

16. The method of claim 1, further comprising the step of monitoring nasal CO_2 to confirm vellum closure.

17. The apparatus of claim 10, further comprising subject's means for monitoring nasal CO_2 to confirm vellum closure.